belkin

Secure Web Camera Adapter

User Manual

F1DN003A – Belkin Secure Web Camera Adapter

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INTRODUCTION

Thank you for purchasing this Belkin Secure Web Camera Adapter, a major enhancement to Belkin's cyber-security product line. It is a simple appliance that connects and disconnects the USB connection of a web camera. It provides an easy and intuitive way to control the web-camera connection and to prevent security breaches.

There are many cases where webcams are used in secure or sensitive environments. Attackers may exploit this by remotely opening the web camera to listen to, or see, the classified conversations and meetings taking place next to these non-classified computers.

The Belkin Secure Web Camera Adapter is a simple accessory that can be used to protect the USB webcam from being abused.

This User Manual provides all the details you'll need to install and operate your new Secure Web Camera Adapter, in addition to expert troubleshoot advice, in the unlikely event of a problem.

Important: This product is equipped with an always-on active anti-tamper system. Any attempt to open the enclosure may activate the anti-tamper system and render the unit permanently inoperable. If the unit's enclosure appears disrupted, please call Belkin Technical Support at **(800) 282-2355**.

Package Contents

- Belkin Secure Web Camera Adapter
- 6 ft. USB type A to USB type B Cable
- This User Manual

Reporting Belkin Product Security Vulnerability

If you are aware of potential security vulnerability with any Belkin Government product, we encourage you to contact us immediately at the following email address: **gov_security@belkin.com** or our technical support line at: **1-800-282-2355**

After your communication is received, Belkin Government personnel will contact you to follow up. To ensure confidentiality, Belkin encourages you to use our PGP encryption key.

The **gov_security@belkin.com** email address is not intended to reach technical support on Belkin Government products or services. Any support inquiries should be directed to our technical support line at: **1-800-282-2355**

Security Features

Belkin's cyber-security products are the most advanced and secure commercially available products in their field. The Belkin Secure Web Camera Adapter is an accessory that is designed to improve security when using web cameras in secure environments, and includes these security features:

Timer Activated Camera

The user must press a button to connect the web camera's USB connection to the computer. The automatic timer disconnects the web camera's USB connection after limited time, forcing the user to press the activation button to keep it active.

Non-Programmable Firmware

The Belkin Secure Web Camera Adapter's firmware cannot be reprogrammed, preventing a remote attack on the control logic.

Active Always-On Active Anti-Tamper

The Belkin Secure Web Camera Adapter includes an active anti-tamper system, preventing access and tampering of the adapter's electronic circuitry, permanently disabling the product once tampering is detected.

Holographic Tamper-Evident Label

A serially numbered holographic tamper-evident security label on the Belkin Secure Web Camera Adapter enclosure clearly shows if the enclosure has been opened or compromised.

Secure Packaging

Secure "tear away" packaging clearly shows if the packaging was opened or tampered with during shipping, and ensures secure delivery all the way to the end user.

USB Device Filtering

The Belkin Secure Web Camera Adapter is programmed to allow only webcams and other audio devices to be used. All other USB peripherals will be filtered and rejected.

Operational Features

The Belkin Secure Web Camera Adapter enhances security when using a web camera in a secure environment. Some of the key operational features are:

Easy to Install

Simply connect the Web Camera Adapter between the web camera and the computer's USB port. Only requires the web camera's driver software to be loaded on the computer(s).

Easy and Intuitive User Interface

Simple two-button interface to activate and disconnect camera.

Activation Timer

Press the Activation button [icon] to start 60-second activation timer. User must press the Activation button [icon] when its light blinks to reset the timer and keep the camera active. If the user did not press the Activation button, then the adapter automatically disconnects the web camera when the timer expires.

Blinking Activation Button

Activation button starts blinking after camera is active for 40 seconds, and blinks faster in the last five seconds. The user must press the activation button during this period to reset the timer and keep the camera activated.

Equipment Requirements

Cables

Belkin Secure Web Camera Adapter connects to the computer with a USB type A to USB type B cable. A 6-foot (1.8m) USB cable is included with the device. The web camera connects directly to the Belkin Secure Web Camera Adapter.

The following Belkin USB cables are also approved for use with the Secure Web Camera Adapter.

- **F3U133b06**
  (Belkin PRO Series - USB cable – 4-pin USB Type A (M) – 4-pin USB Type B (M) - 6 ft. (USB/Hi-Speed USB) - molded - B2B)
- **F3U133b16**
  (Belkin - USB cable – 4-pin USB Type A (M) – 4-pin USB Type B (M) - 16 ft.)
- **F3U133-03-TAA**
  (Belkin PRO Series - USB cable – 4-pin USB Type A (M) – 4-pin USB Type B (M) - 3 ft. (USB/Hi-Speed USB) - molded - B2B)
- **F3U133-06-TAA**
  (Belkin PRO Series - USB cable – 4-pin USB Type A (M) – 4-pin USB Type B (M) - 6 ft. (USB/Hi-Speed USB) - molded - B2B)
- **F3U133-10-TAA**
  (Belkin PRO Series - USB cable – 4-pin USB Type A (M) – 4-pin USB Type B (M) - 10 ft. (USB/Hi-Speed USB) - molded - B2B)

Important: Do not connect a USB hub between the web camera and the Belkin Secure Web Camera Adapter, or between the adapter and the computer.

Web Camera Software

The connected web camera must be able to connect and have a software driver that is compatible to the computer, and operating system, to which the Belkin Secure Web Camera Adapter will connect.

Safety Precautions

Please read the following safety precautions carefully before using the product:

- Before cleaning, disconnect the product from any electrical power supply.
- Do not expose the product to excessive humidity or moisture.
- Do not store or use for extensive period of time in extreme thermal conditions—it may shorten product lifetime.
- Install the product only on a clean secure surface.
- If the product is not used for a long period of time, disconnect it from electrical power.
- If any of the following situations occurs, have the product checked by a Belkin qualified service technician:
  - Liquid penetrates the product's case.
  - The product is exposed to excessive moisture, water or any other liquid.
  - The product is not working well even after carefully following the instructions in this user manual.
  - The product has been dropped or is physically damaged.
  - The product shows obvious signs of breakage or loose internal parts.
  - Power supply overheats, is broken or damaged, or has a damaged cable.
- The product should be stored and used only in temperature- and humidity-controlled environments as defined in the product's environmental specifications.
- Never attempt to open the product enclosure. Any attempt to open the enclosure will permanently damage the product.
- The product contains a non-replaceable internal battery. Never attempt to replace the battery or open the enclosure.

F1DN003A Front-Panel Features

1 Red LED: Web camera is disconnected
2 Disconnect Button
3 Activate Button
4 Green Ring: Web camera is active
5 Tamper-Evident Label

F1DN003A Back-Panel Features

1 USB Type B Connector to Computer
2 USB Type A Connector for Web Camera
3 USB Connection Status LED: Green Power/Red Product Tampered

Tamper-Evident Label

The Belkin Secure Web Camera Adapter uses a holographic tamper-evident label that shows if the enclosure was tampered with. The label shows white dots or the text “VOID” when removed. Inspect the tamper-evident label when opening product packaging.

IMPORTANT NOTICE:

Call Belkin Technical Support at (800) 282-2355 if for any reason, the tamper-evident label is missing, torn, disconnected, appears disrupted, or looks different than the example shown here.

Belkin Holographic Tamper-Evident Label

Active Anti-Tampering System

The Belkin Secure Web Camera Adapter is equipped with an always-on active anti-tampering system. If the system detects mechanical intrusion, the adapter disconnects the USB connection and all LEDs (admin, enable, disable) flash.

If the product indicates a tampered state, avoid using the product and call Belkin Technical Support.

Product Specifications

Part No.	F1DN003A
Enclosure	Impact-Resistant ABS Plastic
Power Requirements	5V DC, 1A (maximum) from connected computer through USB connection
No. of Users Supported	1
User Interface	**Two buttons:** Activate connection and Disconnect **Two lights:** Red LED on Disconnect button Blinking Green ring around Activate button
Connections	**USB type A** – Connect web camera **USB type B** – Connect to computer
Operating Temp	32° to 104° F (0° to 40° C)
Storage Temp	-4° to 140° F (-20° to 60° C)
Humidity	0-80% RH, non-condensing
Dimensions	2.15 (W) x 3.77 (D) x 0.83 (H) inches / 55 (W) x 96 (D) x 21 (H) mm
Weight	Product: 0.55 lbs. (0.2kg)
Made in	USA

Before Installation

Unpack the Product

Before opening the product's sealed packaging, inspect the packaging's seals to assure that the packaging was not opened or tampered with during shipping. If the packaging's seals look suspicious, do not use the product and contact Belkin support.

After opening the packaging, inspect the package contents to verify all required components are included. See the packaging contents list on page 1.

After removing the Belkin Secure Web Camera Adapter from its packaging materials, inspect the tamper-evident label to assure that it is properly sealed and was not tampered with. Do not use that product if the label is damaged or missing, and contact Belkin support.

Where to Place the Belkin Secure Web Camera Adapter

The Belkin Secure Web Camera is designed to be placed on a desktop within easy reach, typically next to the keyboard or mouse, or near the base of the display.

Optionally, you can fix the Belkin Secure Web Camera Adapter to a rack or table using VELCRO® pads, if necessary.

The Secure Web Camera Adapter must be located in a secure and well-protected environment, to prevent potential access by attackers.

Consider the following when deciding where to place the Belkin Secure Web Camera Adapter:

User can easily reach and press the push-buttons.

Distance: The longest USB cable from the Secure Web Camera Adapter to the connected computer can be up to 16 feet.

The web camera must connect directly to the Belkin Secure Web Camera Adapter.

Install Web Camera Software

Before connecting the Belkin Secure Web Camera Adapter, install the web camera driver software on the computer to which the web camera will connect. This may require connecting the web camera directly to the computer and configuring its software.

> It is possible to use other audio\video USB devices through the Secure Web Camera Adapter.
>
> The adapter will not allow USB storage or HID devices to be used.

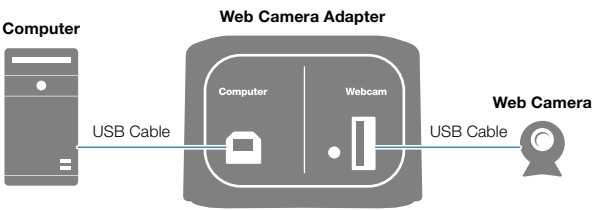
Installation

Step 1 – Connect the web camera

- In the Secure Web Camera Adapter's back panel, insert the USB plug of the web camera into the USB port marked Webcam.
- Mount the web camera on a stable and secure surface, where it can clearly view the computer user or the subject.

Step 2 – Connect to the computer

- In the Secure Web Camera Adapter's back panel, insert the USB type B plug of the USB cable into the USB port marked Computer.
- Insert the other end of the USB cable into an open USB A port on the connected computer.



Connecting the Secure Web Camera Adapter

Note: Use the following USB cables to connect the Belkin Secure Web Camera Adapter to the computer:

- Up to 3 ft. (0.95m): F3U133-03-TAA
- From 3 ft. (0.95m) to 6 ft. (1.8m): F3U133b06 or F3U133-06-TAA
- From 6 ft. (1.8m) to 10 ft. (3m): F3U133-10-TAA
- From 10 ft. (3m) to 16 ft. (4.8m): F3U133b16

Step 3 – Restart the computer

- Restart the connected computer.
- Verify the Secure Web Camera Adapter is receiving power from the computer. On the back panel, the LED next to the webcam port should light up solid Green.
- The **RED** LED light on the **Disconnect** button should light up.
- When the computer is starting up, press the Activate button to connect the web camera to the computer.
- Verify that the computer is identifying the connected web camera.
- Open the web camera software on the computer and verify that the computer is receiving a video signal from the web camera.

Normal Operation

The Belkin Secure Web Camera Adapter begins working automatically once connected to a powered computer. Follow the steps below to verify that the computer identifies the web camera:

- Power up the computer:
  - After the computer's BIOS screen, the operating system's initialization screen appears.
  - Press the **Activate** button on the Secure Web Camera Adapter.
- If the computer is already running:
  - Open the web camera software that you installed before connecting the Secure Web Camera Adapter (see *Before Installation* on page 10).
  - Press the **Activate** button and verify that the software is identifying the web camera.

Operation

The user operates the Belkin Secure Web Camera Adapter by pressing two buttons:

- **Activate** connects the web camera to the computer and starts the automatic timer.
- **Disconnect** disconnects the web camera from the computer.
  1. By default, the Secure Web Camera Adapter keeps the web camera disconnected from the computer.
     - The **RED** LED on the **Disconnect** button lights when the web camera is disconnected.

2. Press the **Activate** button to activate the web camera.
   - The activation timer starts and connects the web camera to the computer for 60 seconds.
   - The **GREEN** ring around the **Activate** button lights up.

3. Forty (40) seconds after the timer starts, the **GREEN** ring around the **Activate** button starts blinking slowly.
   - Five seconds before the timer expires, the **GREEN** ring around the **Activate** button blinks faster.

4. Press the **Activate** button to restart the 60-second timer.
   - If you did not press the **Activate** button when it blinks, the Secure Web Camera Adapter automatically disconnects the web camera from the computer when the 60-second timer ends.
5. When you want to activate the web camera or during a video conference, continue pressing the **Activate** button when it blinks.
6. To disconnect the web camera:
   - Wait for the timer to end and disconnect the camera automatically, **OR**
   - Press the **Disconnect** button [icon].
7. The Secure Web Camera Adapter returns to being disconnected.
   - The **RED** LED on the **Disconnect** button lights.

Belkin Secure Web Camera Adapter LED Indications Table

Product State	Red LEDs	Green LEDs	Admin Bi-Color LED
Idle - Powered on, no device	Off	Off	Green
Product tampered	Blinking red	Blinking red	Blinking red
Device connected but rejected	Blinking	Off	Green
Device connected and OK	On	Off	Green
Device connected and OK – user presses the Activate push-button. First 75% of the time.	Off	On	Green
Device connected and OK – user presses the Activate push-button. Last 25% of the time.	Off	Blinking slow	Green
Device connected and OK – user presses the Activate push-button. Last 5% of the time.	Off	Blinking fast	Green

Important Security Note: If you are aware of potential security vulnerability while installing or operating this product, please contact Belkin immediately at the following email address: **gov_security@belkin.com**

Operation Troubleshooting

This section describes how to resolve problems that arise when operating the Belkin Secure Web Camera Adapter.

No USB connection

Problem: The USB connection between the Belkin Secure Web Camera Adapter and the computer is not working.

- LED on the adapter's back panel does not light.
- RED LED on the **Disconnect** button does not light.

Solutions:

Check the computer:

- Connect the USB cable from the Belkin Secure Web Camera Adapter to another USB port on the computer.
- Connect the web camera directly to a USB port on the computer.

Check the cable:

- Replace the USB cable connecting the Belkin Secure Web Camera Adapter to the computer.

Problem: The USB connection between the web camera and the Belkin Secure Web Camera Adapter is not working.

- Computer does not identify the web camera when the USB connection is activated.
- Activity light on the web camera does not light.
- LED on the adapter's back panel does light.
- RED LED on the **Disconnect** button does light.

Solutions:

Check the computer:

- Restart the computer, pressing the **Activate** button while the operating system is initializing.
- Connect the web camera directly to a USB port on the computer.

Replace the Secure Web Camera Adapter:

- Replace the Secure Web Camera Adapter and check if it is working.

Computer does not identify the camera

Problem: The Belkin Secure Web Camera Adapter and the connected web camera appear to operate, but the computer does not detect the camera.

- LED on the adapter's back panel does light.
- RED LED on the **Disconnect** button does light.
- GREEN light around Activate button lights when pressing the button.

- Activity light on the web camera does light.
- Computer does not identify the web camera when the USB connection is activated.

Solutions:

Check the computer:

- Connect the web camera directly to the computer, reinstall the driver software, and restart the computer.
- Open the web camera software on the computer and check that it is properly configured.
- On a Microsoft® Windows® computer, check if it identifies the camera: Open the **Control Panel -> Device Manager -> Imaging Devices**, and check that the web camera's driver software is installed.

FCC Statement

DECLARATION OF CONFORMITY WITH FCC RULES FOR ELECTROMAGNETIC COMPATIBILITY

We, Belkin International, Inc., of 12045 E. Waterfront Drive, Playa Vista, CA 90094, declare under our sole responsibility that the products: **F1DN003A**, to which this declaration relates:

Complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CE Declaration of Conformity

We, Belkin International, Inc., declare under our sole responsibility that the F1DN003A, to which this declaration relates, are in conformity with Emissions Standard EN55022 and with Immunity Standard EN55024, LVP EN61000-3-2, and EN61000-3-3.

ICES

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme á la norme NMB-003 du Canada.

Warranty

Belkin International, Inc., Limited 3-Year Product Warranty

What this warranty covers?

Belkin International, Inc. (“Belkin”) warrants to the original purchaser of this Belkin product that the product shall be free of defects in design, assembly, material, or workmanship.

What the period of coverage is?

Belkin warrants the Belkin product for three years.

What will we do to correct problems?

Product Warranty.

Belkin will repair or replace, at its option, any defective product free of charge (except for shipping charges for the product). Belkin reserves the right to discontinue any of its products without notice, and disclaims any limited warranty to repair or replace any such discontinued products. In the event that Belkin is unable to repair or replace the product (for example, because it has been discontinued), Belkin will offer either a refund or a credit toward the purchase of another product from Belkin.com in an amount equal to the purchase price of the product as evidenced on the original purchase receipt as discounted by its natural use.

What is not covered by this warranty?

All above warranties are null and void if the Belkin product is not provided to Belkin for inspection upon Belkin's request at the sole expense of the purchaser, or if Belkin determines that the Belkin product has been improperly installed, altered in any way, or tampered with. The Belkin Product Warranty does not protect against acts of God such as flood, lightning, earthquake, war, vandalism, theft, normal-use wear and tear, erosion, depletion, obsolescence, abuse, damage due to low voltage disturbances (i.e. brownouts or sags), non-authorized program, or system equipment modification or alteration.

How to get service?

To get service for your Belkin product you must take the following steps:

1. Contact Belkin International, Inc.,
   at 12045 E. Waterfront Drive, Playa Vista, CA 90094,
   Attn: Customer Service, or call **(800)-282-2355**,
   within 15 days of the Occurrence.
   Be prepared to provide the following information:
   a. The part number of the Belkin product.
   b. Where you purchased the product.
   c. When you purchased the product.
   d. Copy of original receipt.
2. Your Belkin Customer Service Representative will then instruct you on how to forward your receipt and Belkin product and how to proceed with your claim.

Belkin reserves the right to review the damaged Belkin product. All costs of shipping the Belkin product to Belkin for inspection shall be borne solely by the purchaser.

If Belkin determines, in its sole discretion, that it is impractical to ship the damaged equipment to Belkin, Belkin may designate, in its sole discretion, an equipment repair facility to inspect and estimate the cost to repair such equipment. The cost, if any, of shipping the equipment to and from such repair facility and of such estimate shall be borne solely by the purchaser. Damaged equipment must remain available for inspection until the claim is finalized. Whenever claims are settled, Belkin reserves the right to be subrogated under any existing insurance policies the purchaser may have.

How state law relates to the warranty?

THIS WARRANTY CONTAINS THE SOLE WARRANTY OF BELKIN. THERE ARE NO OTHER WARRANTIES, EXPRESSED OR, EXCEPT AS REQUIRED BY LAW, IMPLIED, INCLUDING THE IMPLIED WARRANTY OR CONDITION OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SUCH IMPLIED WARRANTIES, IF ANY, ARE LIMITED IN DURATION TO THE TERM OF THIS WARRANTY.

Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.

IN NO EVENT SHALL BELKIN BE LIABLE FOR INCIDENTAL, SPECIAL, DIRECT, INDIRECT, CONSEQUENTIAL OR MULTIPLE DAMAGES SUCH AS, BUT NOT LIMITED TO, LOST BUSINESS OR PROFITS ARISING OUT OF THE SALE OR USE OF ANY BELKIN PRODUCT, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state. Some states do not allow the exclusion or limitation of incidental, consequential, or other damages, so the above limitations may not apply to you.

GS 5/15/2013

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